

REMARKS

The specification has been amended to include reference numerals for newly added Figure 3. See Drawing Correction submitted herewith. Also, independent Claims 1, 11, and 21 have been amended. No new matter has been added in the claims or the specification (See Specification for support, page 1, line 8-21; page 4, lines 3-14 and 23-25; page 5, lines 1-2).

I. Rejection of Claims 1-22, 25-37 under 35 USC §103

Claims 1-22 and 25-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over Reese et al. ("Reese") (US 5,656,791A) in view of Kock et al. ("Kock") (US 4,498,395A).

Reese teaches a shaped tungsten liner for use in perforators in a subterranean formation (Col. 3, ll. 28-32). The Office Action asserts that Reese and Kock are analogous art by relying on Kock's "teaching of a powder liner composition" (Detailed Action, page 2). However, Kock fails to teach or suggest any application of its invention to shaped charge explosive liners. Rather, Kock teaches forming an "impact projectile" that is a "solid cylinder of metal" and is designed to penetrate an armored plate while remaining intact (Kock, Col. 1, ll. 1-20). Kock is directed to solving limitations in bullet formation for use as an intact projectile. The formation of a projectile specifically designed to *remain intact* from before expulsion, through flight and after impact is in direct contrast to the desired action (disintegration) of Reese's shaped liner (Col. 3, ll. 28-32) or as required by Applicant's claims (Cl. 1, for example, "the explosive material, upon detonation, operable to disintegrate the liner"). In fact, the problems addressed in Kock regarding tensile and compressive stresses and brittleness of an impact projectile is not an issue in liners as applied in Reese or Applicant's amended Claims 1, 11, or 21 (Kock, Column 1, lines 10-12). Because Kock strives to address problems not associated in any way with the shaped disintegrating charges used in perforating well tools, combining the teachings of Kock and Reese is not obvious. Nor do Kock or Reese teach or suggest such a combination.

Additionally, the Claims, as amended are drawn to a subterranean perforating tool, clearly not taught or suggested by Kock. Neither is the use of a tungsten content taught by Kock for use in such an application. As explained above, the teachings of Kock are not analogous to disintegrating shaped charges for perforating downhole formations.

II. Provisional Rejection of Claims 1-22, 25-37 for Obviousness-type Double Patenting


Claims 1-22 and 25-37 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 3, 4, 5, 7-11, 14-17, 20 and 22-24 of Application No. 09/504,332. This application has issued as U.S. Patent No. 6,470,804 on October 29, 2002.

In response, the Applicants have filed a terminal disclaimer under 37 C.F.R. 1.321(c). Therefore, amended, independent Claims 1, 11, and 21 and the claims dependent thereon are now in condition for allowance.

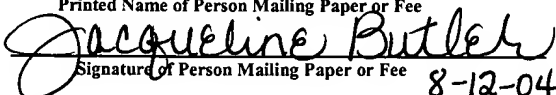
If the Examiner is of the opinion that a telephone interview will speed prosecution of the application, please contact Peter Schroeder at 214.220.0444. The Commissioner of Patents is hereby authorized to charge any fees or overpayments to Deposit Account No. 50-3037. A duplicate copy of this fee authorization sheet is enclosed for this purpose.

Dated: August 12, 2004

Respectfully submitted,


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